

Welcome United States Patent and Trademark Office

☐ Search Results **BROWSE SEARCH IEEE XPLORE GUIDE** Results for "((diffserv<in>metadata) <and> (rmi<in>metadata))" **⊠**e-mail Your search matched 0 documents. A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order. » Search Options View Session History **Modify Search New Search** ((diffserv<in>metadata)<and>(rmi<in>metadata)) Search, ☐ Check to search only within this results set » Key **Display Format:** Citation C Citation & Abstract **IEEE JNL** IEEE Journal or Magazine **IET JNL** IET Journal or Magazine No results were found. IEEE Conference **IEEE CNF** Proceeding Please edit your search criteria and try again. Refer to the Help pages if you need assistan **IET CNF IET Conference** Proceeding IEEE STD IEEE Standard

indexed by inspec

Help Contact Us Privacy &:

© Copyright 2006 IEEE –



Welcome United States Patent and Trademark Office

□ Search Results

BROWSE

☐ Check to search only within this results set

SEARCH

IEEE XPLORE GUIDE

Results for "((router rmi flow<in>metadata) <and> (classify<in>metadata))"

Your search matched 0 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

» Search Options

View Session History

Modify Search

New Search

((router rmi flow<in>metadata) <and> (classify<in>metadata))

Search.

⊠ e-mail

» Key

IEEE Journal or **IEEE JNL**

Magazine

IET JNL

IET Journal or Magazine

IEEE CNF

IET CNF

IEEE Conference

Proceeding

Proceeding

IET Conference

IEEE STD IEEE Standard

No results were found.

Display Format:

Please edit your search criteria and try again. Refer to the Help pages if you need assistan

© Citation C Citation & Abstract

Help Contact Us Privacy &:

© Copyright 2006 IEEE -

Indexed by ত্রী Inspec'



Welcome United States Patent and Trademark Office

AbstractPlus | Full Text: PDF(1448 KB) IEEE CNF

□ Search Results BROWSE

SEARCH

IEEE XPLORE GUIDE

Results for "((class	ify <in>metadata</in>) <and></and>	(rmi <in>metadata))"</in>
Your search matched	1 of 1498420 do	Pinante	

⊠ e-mail

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

» Search Options View Session History **Modify Search** New Search ((classify<in>metadata)<and>(rmi<in>metadata)) Search ☐ Check to search only within this results set » Key Display Format: Citation C Citation & Abstract **IEEE JNL** IEEE Journal or Magazine view selected items. Select All Deselect All **IET JNL** IET Journal or Magazine **IEEE Conference IEEE CNF** Proceeding 1. Java-based distributed architectures for intensive computations related t **IET Conference** Di Santo, M.; Ranaldo, N.; Vaccaro, A.; Zimeo, E.; **IET CNF** Proceeding Parallel and Distributed Processing Symposium, 2004. Proceedings. 18th Inter 26-30 April 2004 Page(s):157 IEEE STD IEEE Standard Digital Object Identifier 10.1109/IPDPS.2004.1303145

Rights and Permissions

indexed by
inspec

Help Contact Us Privacy &:

© Copyright 2006 IEEE -



Welcome United States Patent and Trademark Office

☐ Search Results **BROWSE SEARCH IEEE XPLORE GUIDE** Results for "(map socket rmi<in>metadata)" **⊠**e-mail Your search matched 0 documents. A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order. » Search Options View Session History **Modify Search** New Search (map socket rmi<in>metadata) Search ☐ Check to search only within this results set » Key IEEE Journal or IEEE JNL Magazine **IET JNL** IET Journal or Magazine No results were found. IEEE Conference IEEE CNF Proceeding Please edit your search criteria and try again. Refer to the Help pages if you need assistan **IET Conference IET CNF** search. Proceeding IEEE STD IEEE Standard

indexed by Inspec*

Help Contact Us Privacy &:

© Copyright 2006 IEEE –



Welcome United States Patent and Trademark Office

☐ Search Results

BROWSE

Check to search only within this results set

SEARCH

IEEE XPLORE GUIDE

Results for "((map socket <in>metadata) <and> (remote method<in>metadata))"

Your search matched 0 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by Relevance in Descending order.

» Search Options

View Session History

New Search

Modify Search

Display Format:

((map socket <in>metadata) <and> (remote method<in>metadata))

Search

⊠e-mail

» Key

IEEE Journal or

Magazine

IET JNL

IEEE JNL

IET Journal or Magazine

IEEE CNF

IEEE Conference

Proceeding

IET CNF

IET Conference

Proceeding

IEEE STD IEEE Standard

No results were found.

Please edit your search criteria and try again. Refer to the Help pages if you need assistan

Citation C Citation & Abstract

search.

indexed by ज्ञे Inspec° Help Contact Us Privacy &:

© Copyright 2006 IEEE -

	(Full Service) Register (Limited Service, Free) Login The ACM Digital Library C The Guide SEARCH
THE ACM DIGITAL LIBRARY Enter words, phrases or names below. Surround phra	Advanced Search Tips ses or full names with double quotation marks.
Desired Results: must have all of the words or phrases router flow classify QoS must have any of the words or phrases "RMI" "remote method invocation" must have none of the words or phrases Only search in:* C Title C Abstract C Review All Information *Searches will be performed on all available informat above.	Name or Affiliation: Authored by: • all • any • none Edited by: • all • any • none Reviewed by: • all • any • none SEARCH ion, including full text where available, unless specified
ISBN / ISSN: © Exact C Expand	DOI: © Exact O Expand SEARCH
Published: By: all any none In: all none Since: Month Year Before: Month Year As: Any type of publication	Conference Proceeding: Sponsored By: Conference Location: Conference Year: Yyyyy
Classification: (CCS) Primary Only Classified as: all O any O none Subject Descriptor: all O any O none Keyword Assigned: all O any O none	Results must have accessible: Full Text Abstract Review

SEARCH

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

<u>Terms of Usage Privacy Policy Code of Ethics Contact Us</u>



Subscribe (Full Service) Register (Limited Service, Free) Login

Search: • The ACM Digital Library • The Guide

+router +flow +classify +QoS "RMI" "remote method invocation

SEARCH

THE ACH DIGITAL LIBRARY

Feedback Report a problem Satisfaction survey

Published before January 2001
Terms used router flow classify QoS RMI remote method invocation

Found 28 of 118,363

Sort results

by Display

results

relevance 💆

expanded form

Save results to a Binder

Search Tips

Try an <u>Advanced Search</u>
Try this search in <u>The ACM Guide</u>

Open results in a new window

Results 1 - 20 of 28

Result page: 1 2 next

Relevance scale

1 Fast detection of communication patterns in distributed executions

Thomas Kunz, Michiel F. H. Seuren

November 1997 Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research CASCON '97

Publisher: IBM Press

Full text available: pdf(4.21 MB)

Additional Information: full citation, abstract, references, index terms

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

2 Load-sensitive routing of long-lived IP flows

Anees Shaikh, Jennifer Rexford, Kang G. Shin

August 1999 ACM SIGCOMM Computer Communication Review , Proceedings of the conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM '99, Volume 29 Issue 4

Publisher: ACM Press

Full text available: pdf(1.57 MB)

Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>citings</u>, <u>index</u> terms

Internet service providers face a daunting challenge in provisioning network resources, due to the rapid growth of the Internet and wide fluctuations in the underlying traffic patterns. The ability of dynamic routing to circumvent congested links and improve application performance makes it a valuable traffic engineering tool. However, deployment of load-sensitive routing is hampered by the overheads imposed by link-state update propagation, path selection, and signaling. Under reasonable protoc ...

Router plugins: a software architecture for next-generation routers
Dan Decasper, Zubin Dittia, Guru Parulkar, Bernhard Plattner

February 2000 IEEE/ACM Transactions on Networking (TON), Volume 8 Issue 1

Publisher: IEEE Press

Full text available: pdf(530.34 KB) Additional Information: full citation, references, citings, index terms

Keywords: communication system routing, communication system security, internet, modular computer systems

Router plugins: a software architecture for next generation routers

Dan Decasper, Zubin Dittia, Guru Parulkar, Bernhard Plattner

October 1998 ACM SIGCOMM Computer Communication Review, Proceedings of the ACM SIGCOMM '98 conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM '98, Volume 28 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(1.82 MB) terms

Present day routers typically employ monolithic operating systems which are not easily upgradable and extensible. With the rapid rate of protocol development it is becoming increasingly important to dynamically upgrade router software in an incremental fashion. We have designed and implemented a high performance, modular, extended integrated services router software architecture in the NetBSD operating system kernel. This architecture allows code modules, called *plugins*, to be dynamically ...

Keywords: high performance integrated services routing, modular router architecture, router plugins

MPICH-GQ: quality-of-service for message passing programs

Alain J. Roy, Ian Foster, William Gropp, Brian Toonen, Nicholas Karonis, Volker Sander November 2000 Proceedings of the 2000 ACM/IEEE conference on Supercomputing (CDROM) Supercomputing '00

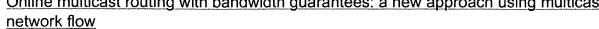
Publisher: IEEE Computer Society

Full text available: pdf(140.75 KB) Additional Information: full citation, abstract, references, citings, index Publ<u>isher Site</u>

Parallel programmers typically assume that all resources required for a program's execution are dedicated to that purpose. However, in local and wide area networks, contention for shared networks, CPUs, and I/O systems can result in significant variations in availability, with consequent adverse effects on overall performance. We describe a new message-passing architecture, MPICH-GQ, that uses quality of service (QoS) mechanisms to manage contention and hence improve performance of message ...

Keywords: MPI, Quality of Service, Differentiated Services, TCP

Online multicast routing with bandwidth guarantees: a new approach using multicast



Murali S. Kodialam, T. V. Lakshman, Sudipta Sengupta

June 2000 ACM SIGMETRICS Performance Evaluation Review, Proceedings of the 2000 ACM SIGMETRICS international conference on Measurement and modeling of computer systems SIGMETRICS '00, Volume 28 Issue 1

Publisher: ACM Press

Full text available: pdf(883.76 KB) Additional Information: full citation, abstract, references, index terms

This paper presents a new algorithm for on-line routing of bandwidth-guaranteed multicasts where routing requests arrive one-by-one without there being any a priori knowledge of future requests. A multicast routing request consists of a source s, a set of receivers R, and a bandwidth requirement b. This multicast routing problem arises in

many contexts. Two applications of interest are routing of point-to-multipoint label-switched paths in ...

Keywords: Steiner tree, multicast routing, network flow, traffic engineering

7 Dynamic-CBT and ChIPS—router support for improved multimedia performance on



the Internet

Jae Chung, Mark Claypool

October 2000 Proceedings of the eighth ACM international conference on Multimedia MULTIMEDIA '00

Publisher: ACM Press

Full text available: pdf(1.16 MB)

Additional Information: full citation, abstract, references, index terms

The explosive increase in the volume and variety of Internet traffic has placed a growing emphasis on congestion control and fairness in Internet routers. Approaches to the problem of congestion, such as active queue management schemes like Random Early Detection (RED) use congestion avoidance techniques and are successful with TCP flows. Approaches to the problem of fairness, such as Fair Random Early Drop (FRED), keep perflow state and punish misbehaved, non-TCP flows. Unfortunately, these ...

Keywords: congestion, fairness, jitter, multimedia, queue management, router

8 A routing architecture for mobile integrated services networks

Shree Murthy, J. J. Garcia-Luna-Aceves

December 1998 Mobile Networks and Applications, Volume 3 Issue 4

Publisher: Kluwer Academic Publishers

Full text available: pdf(272.02 KB)

Additional Information: full citation, abstract, references, citings, index terms

A drawback of the conventional Internet routing architecture is that its route computation and packet forwarding mechanisms are poorly integrated with congestion control mechanisms. Any datagram offered to the network is accepted; routers forward packets on a best-effort basis and react to congestion only after the network resources have already been wasted. A number of proposals improve on this to support multimedia applications; a promising example is the Integrated Services Packet Networ ...

9 High-speed policy-based packet forwarding using efficient multi-dimensional range



matching

T. V. Lakshman, D. Stiliadis

October 1998 ACM SIGCOMM Computer Communication Review , Proceedings of the ACM SIGCOMM '98 conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM '98, Volume 28 Issue 4

Publisher: ACM Press

Full text available: pdf(1.82 MB)

Additional Information: <u>full citation</u>, <u>abstract</u>, <u>references</u>, <u>citings</u>, <u>index</u> <u>terms</u>

The ability to provide differentiated services to users with widely varying requirements is becoming increasingly important, and Internet Service Providers would like to provide these differentiated services using the same shared network infrastructure. The key mechanism, that enables differentiation in a connectionless network, is the packet classification function that parses the headers of the packets, and after determining their context, classifies them based on administrative policies or re ...

10 Improving and managing multimedia performance over TCP-IP nets

Nathan J. Muller

December 1998 International Journal of Network Management, Volume 8 Issue 6

Publisher: John Wiley & Sons, Inc.

Full text available: pdf(338.34 KB) Additional Information: full citation, abstract, index terms

The TCP-IP-based Internet and, consequently corporate Intranets, were not designed for multimedia traffic. This article discusses the several ways of improving multimedia performance, finding that data compression techniques are no longer the most important factor. © 1998 John Wiley & Sons, Ltd.

11 Papers: YESSIR: a simple reservation mechanism for the Internet

Ping Pan, Henning Schulzrinne

April 1999 ACM SIGCOMM Computer Communication Review, Volume 29 Issue 2

Publisher: ACM Press

Full text available: pdf(1.23 MB) Additional Information: full citation, abstract, references, citings

RSVP has been designed to support resource reservation in the Internet. However, it has two major problems: complexity and scalability. The former results in large message processing overhead at end systems and routers, and inefficient firewall processing at the edge of the network. The latter implies that in a backbone environment, the amount of bandwidth consumed by refresh messages and the storage space that is needed to support a large number of flows at a router are too large. We have devel ...

12 Packet classification on multiple fields

Pankaj Gupta, Nick McKeown

August 1999 ACM SIGCOMM Computer Communication Review, Proceedings of the conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM '99, Volume 29 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(1.46 MB)

Routers classify packets to determine which flow they belong to, and to decide what service they should receive. Classification may, in general, be based on an arbitrary number of fields in the packet header. Performing classification quickly on an arbitrary number of fields is known to be difficult, and has poor worst-case performance. In this paper, we consider a number of classifiers taken from real networks. We find that the classifiers contain considerable structure and redundancy that can ...

13 Architecture and experimental results for quality of service in mobile networks using **RSVP** and CBQ

Indu Mahadevan, Krishna M. Sivalingam

May 2000 Wireless Networks, Volume 6 Issue 3

Publisher: Kluwer Academic Publishers

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(262.65 KB) terms

Efforts are underway to enhance the Internet with Quality of Service (QoS) capabilities for transporting real‐ time data. The issue of wireless networks and mobile hosts being able to support applications that require QoS has become very significant. The ReSerVation Protocol (RSVP) provides a signaling mechanism for end‐to‐end QoS negotiation. RSVP has been designed to work with wired networks. To make RSVP suitable for wireless networks, changes need to be ...

14 Efficient policies for carrying Web traffic over flow-switched networks Anja Feldmann, Jennifer Rexford, Ramón Cáceres December 1998 IEEE/ACM Transactions on Networking (TON), Volume 6 Issue 6 Publisher: IEEE Press

Full text available: Topdf(209.39 KB) Additional Information: full citation, references, citings, index terms

Keywords: HTTP protocol, IP flows, Internet traffic characterization, routing, signaling, switching

15 Design of a high-performance ATM firewall

Jun Xu, Mukesh Singhal August 1999 ACM Transactions on Information and System Security (TISSEC), Volume 2

Issue 3 Publisher: ACM Press

Full text available: 🔁 pdf(143.19 KB) Additional Information: full citation, abstract, references, index terms

A router-based packet-filtering firewall is an effective way of protecting an enterprise network from unauthorized access. However, it will not work efficiently in an ATM network because it requires the termination of end-to-end ATM connections at a packet-filtering router, which incurs huge overhead of SAR (Segmentation and Reassembly). Very few approaches to this problem have been proposed in the literature, and none is completely satisfactory. In this paper we present the hardware desig ...

Keywords: TCP/IP, asynchronous transfer mode, firewall, packet filtering, switch architecture

16 A flow-based approach to datagram security

Suvo Mittra, Thomas Y. C. Woo

October 1997 ACM SIGCOMM Computer Communication Review, Proceedings of the ACM SIGCOMM '97 conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM **'97**, Volume 27 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(2.04 MB) terms

Datagram services provide a simple, flexible, robust, and scalable communication abstraction; their usefulness has been well demonstrated by the success of IP, UDP, and RPC. Yet, the overwhelming majority of network security protocols that have been proposed are geared towards connection-oriented communications. The few that do cater to datagram communications tend to either rely on long term host-pair keying or impose a session-oriented (i.e., requiring connection setup) semantics. Separately, t ...

17 Linux and the Next Generation Internet

Stan Michael Stricklen, Bob Cummings

April 2000 Linux Journal

Publisher: Specialized Systems Consultants, Inc.

Full text available: html(25.62 KB) Additional Information: full citation, abstract, references, index terms

This article describes the authors' implementation of a demonstration environment for differentiated Internet services (DiffServ) using Linux-based routers.

18 Adaptive resource management for flow-based IP/ATM hybrid switching systems Hao Che, San-qi Li, Arthur Lin

October 1998 IEEE/ACM Transactions on Networking (TON), Volume 6 Issue 5

Publisher: IEEE Press

Full text available: pdf(570.85 KB) Additional Information: full citation, references, index terms

Keywords: adaptive resource management, cut-through switching, flow cache management, flow classification, flow-based IP/ATM hybrid switching

19 A dynamic view-oriented group communication service

Roberto De Prisco, Alan Fekete, Nancy Lynch, Alex Shvartsman

June 1998 Proceedings of the seventeenth annual ACM symposium on Principles of distributed computing PODC '98

Publisher: ACM Press

Full text available: pdf(3.91 MB) Additional Information: full citation, references, citings, index terms

²⁰ Fast and scalable layer four switching

V. Srinivasan, G. Varghese, S. Suri, M. Waldvogel

October 1998 ACM SIGCOMM Computer Communication Review, Proceedings of the ACM SIGCOMM '98 conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM

'98, Volume 28 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(1.76 MB)

In Layer Four switching, the route and resources allocated to a packet are determined by the destination address as well as other header fields of the packet such as source address, TCP and UDP port numbers. Layer Four switching unifies firewall processing, RSVP style resource reservation filters, QoS Routing, and normal unicast and multicast forwarding into a single framework. In this framework, the forwarding database of a router consists of a potentially large number of filters on key header ...

Results 1 - 20 of 28 Result page: 1 2 next

> The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc. Terms of Usage Privacy Policy Code of Ethics Contact Us

> Useful downloads: Adobe Acrobat QuickTime Windows Media Player



Subscribe (Full Service) Register (Limited Service, Free) Login

+router +flow +classify +QoS "remote method invocation"

SEARCH

THE ACH DIGITAL LIBRARY

Feedback Report a problem Satisfaction survey

Published before January 2001 Terms used router flow classify QoS remote method invocation

Found 28 of 118,363

Sort results

by

Display

results

relevance

expanded form

Save results to a Binder Search Tips

Open results in a new

Try an Advanced Search Try this search in The ACM Guide

Results 1 - 20 of 28

Result page: 1 2 next

Relevance scale

Fast detection of communication patterns in distributed executions

window

Thomas Kunz, Michiel F. H. Seuren

November 1997 Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research CASCON '97

Publisher: IBM Press

Full text available: pdf(4.21 MB)

Additional Information: full citation, abstract, references, index terms

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

2 Load-sensitive routing of long-lived IP flows

Anees Shaikh, Jennifer Rexford, Kang G. Shin

August 1999 ACM SIGCOMM Computer Communication Review, Proceedings of the conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM '99, Volume 29 Issue 4

Publisher: ACM Press

Full text available: pdf(1.57 MB)

Additional Information: full citation, abstract, references, citings, index terms

Internet service providers face a daunting challenge in provisioning network resources, due to the rapid growth of the Internet and wide fluctuations in the underlying traffic patterns. The ability of dynamic routing to circumvent congested links and improve application performance makes it a valuable traffic engineering tool. However, deployment of load-sensitive routing is hampered by the overheads imposed by link-state update propagation, path selection, and signaling. Under reasonable protoc ...

Router plugins: a software architecture for next-generation routers

Dan Decasper, Zubin Dittia, Guru Parulkar, Bernhard Plattner February 2000 IEEE/ACM Transactions on Networking (TON), Volume 8 Issue 1

Publisher: IEEE Press

Full text available: pdf(530.34 KB) Additional Information: full citation, references, citings, index terms

Keywords: communication system routing, communication system security, internet, modular computer systems

4 Router plugins: a software architecture for next generation routers

Dan Decasper, Zubin Dittia, Guru Parulkar, Bernhard Plattner

October 1998 ACM SIGCOMM Computer Communication Review, Proceedings of the ACM SIGCOMM '98 conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM **'98**, Volume 28 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(1.82 MB) terms

Present day routers typically employ monolithic operating systems which are not easily upgradable and extensible. With the rapid rate of protocol development it is becoming increasingly important to dynamically upgrade router software in an incremental fashion. We have designed and implemented a high performance, modular, extended integrated services router software architecture in the NetBSD operating system kernel. This architecture allows code modules, called *plugins*, to be dynamically ...

Keywords: high performance integrated services routing, modular router architecture, router plugins

MPICH-GQ: quality-of-service for message passing programs

Alain J. Roy, Ian Foster, William Gropp, Brian Toonen, Nicholas Karonis, Volker Sander November 2000 Proceedings of the 2000 ACM/IEEE conference on Supercomputing. (CDROM) Supercomputing '00

Publisher: IEEE Computer Society

Full text available: pdf(140.75 KB) Additional Information: full citation, abstract, references, citings, index Publisher Site

Parallel programmers typically assume that all resources required for a program's execution are dedicated to that purpose. However, in local and wide area networks, contention for shared networks, CPUs, and I/O systems can result in significant variations in availability, with consequent adverse effects on overall performance. We describe a new message-passing architecture, MPICH-GQ, that uses quality of service (QoS) mechanisms to manage contention and hence improve performance of message ...

Keywords: MPI, Quality of Service, Differentiated Services, TCP

6 Online multicast routing with bandwidth guarantees: a new approach using multicast



Murali S. Kodialam, T. V. Lakshman, Sudipta Sengupta

June 2000 ACM SIGMETRICS Performance Evaluation Review, Proceedings of the 2000 ACM SIGMETRICS international conference on Measurement and modeling of computer systems SIGMETRICS '00, Volume 28 Issue 1

Publisher: ACM Press

Full text available: pdf(883.76 KB) Additional Information: full citation, abstract, references, index terms

This paper presents a new algorithm for on-line routing of bandwidth-guaranteed multicasts where routing requests arrive one-by-one without there being any a priori knowledge of future requests. A multicast routing request consists of a source s, a set of receivers R, and a bandwidth requirement b. This multicast routing problem arises in



many contexts. Two applications of interest are routing of point-to-multipoint labelswitched paths in ...

Keywords: Steiner tree, multicast routing, network flow, traffic engineering

7 Dynamic-CBT and ChIPS—router support for improved multimedia performance on



the Internet

Jae Chung, Mark Claypool

October 2000 Proceedings of the eighth ACM international conference on Multimedia **MULTIMEDIA '00**

Publisher: ACM Press

Full text available: pdf(1.16 MB) Additional Information: full citation, abstract, references, index terms

The explosive increase in the volume and variety of Internet traffic has placed a growing emphasis on congestion control and fairness in Internet routers. Approaches to the problem of congestion, such as active queue management schemes like Random Early Detection (RED) use congestion avoidance techniques and are successful with TCP flows. Approaches to the problem of fairness, such as Fair Random Early Drop (FRED), keep perflow state and punish misbehaved, non-TCP flows. Unfortunately, these ...

Keywords: congestion, fairness, jitter, multimedia, queue management, router

A routing architecture for mobile integrated services networks

Shree Murthy, J. J. Garcia-Luna-Aceves

December 1998 Mobile Networks and Applications, Volume 3 Issue 4

Publisher: Kluwer Academic Publishers

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(272.02 KB) terms

A drawback of the conventional Internet routing architecture is that its route computation and packet forwarding mechanisms are poorly integrated with congestion control mechanisms. Any datagram offered to the network is accepted; routers forward packets on a best-effort basis and react to congestion only after the network resources have already been wasted. A number of proposals improve on this to support multimedia applications; a promising example is the Integrated Services Packet Networ ...

9 High-speed policy-based packet forwarding using efficient multi-dimensional range



matching

T. V. Lakshman, D. Stiliadis

October 1998 ACM SIGCOMM Computer Communication Review , Proceedings of the ACM SIGCOMM '98 conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM **'98**. Volume 28 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(1.82 MB) terms

The ability to provide differentiated services to users with widely varying requirements is becoming increasingly important, and Internet Service Providers would like to provide these differentiated services using the same shared network infrastructure. The key mechanism, that enables differentiation in a connectionless network, is the packet classification function that parses the headers of the packets, and after determining their context, classifies them based on administrative policies or re ...

10 Improving and managing multimedia performance over TCP-IP nets

Nathan J. Muller

December 1998 International Journal of Network Management, Volume 8 Issue 6

Publisher: John Wiley & Sons, Inc.

Full text available: pdf(338.34 KB) Additional Information: full citation, abstract, index terms

The TCP-IP-based Internet and, consequently corporate Intranets, were not designed for multimedia traffic. This article discusses the several ways of improving multimedia performance, finding that data compression techniques are no longer the most important factor. © 1998 John Wiley & Sons, Ltd.

11 Papers: YESSIR: a simple reservation mechanism for the Internet

Ping Pan, Henning Schulzrinne

April 1999 ACM SIGCOMM Computer Communication Review, Volume 29 Issue 2

Publisher: ACM Press

Full text available: pdf(1.23 MB) Additional Information: full citation, abstract, references, citings

RSVP has been designed to support resource reservation in the Internet. However, it has two major problems: complexity and scalability. The former results in large message processing overhead at end systems and routers, and inefficient firewall processing at the edge of the network. The latter implies that in a backbone environment, the amount of bandwidth consumed by refresh messages and the storage space that is needed to support a large number of flows at a router are too large. We have devel ...

12 Packet classification on multiple fields

Pankaj Gupta, Nick McKeown

August 1999 ACM SIGCOMM Computer Communication Review , Proceedings of the conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM '99, Volume 29 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(1.46 MB)

Routers classify packets to determine which flow they belong to, and to decide what service they should receive. Classification may, in general, be based on an arbitrary number of fields in the packet header. Performing classification quickly on an arbitrary number of fields is known to be difficult, and has poor worst-case performance. In this paper, we consider a number of classifiers taken from real networks. We find that the classifiers contain considerable structure and redundancy that can ...

13 Architecture and experimental results for quality of service in mobile networks using RSVP and CBQ

Indu Mahadevan, Krishna M. Sivalingam

May 2000 Wireless Networks, Volume 6 Issue 3

Publisher: Kluwer Academic Publishers

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(262.65 KB) terms

Efforts are underway to enhance the Internet with Quality of Service & lpar; QoS) capabilities for transporting real‐ time data. The issue of wireless networks and mobile hosts being able to support applications that require QoS has become very significant. The ReSerVation Protocol (RSVP) provides a signaling mechanism for end‐to‐end QoS negotiation. RSVP has been designed to work with wired networks. To make RSVP suitable for wireless networks, changes need to be ...

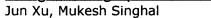
14 Efficient policies for carrying Web traffic over flow-switched networks Anja Feldmann, Jennifer Rexford, Ramón Cáceres December 1998 IEEE/ACM Transactions on Networking (TON), Volume 6 Issue 6 Publisher: IEEE Press

Full text available: pdf(209.39 KB) Additional Information: full citation, references, citings, index terms

Keywords: HTTP protocol, IP flows, Internet traffic characterization, routing, signaling,

switching

15 Design of a high-performance ATM firewall



August 1999 ACM Transactions on Information and System Security (TISSEC), Volume 2 Issue 3

Publisher: ACM Press

Full text available: pdf(143.19 KB) Additional Information: full citation, abstract, references, index terms

A router-based packet-filtering firewall is an effective way of protecting an enterprise network from unauthorized access. However, it will not work efficiently in an ATM network because it requires the termination of end-to-end ATM connections at a packet-filtering router, which incurs huge overhead of SAR (Segmentation and Reassembly). Very few approaches to this problem have been proposed in the literature, and none is completely satisfactory. In this paper we present the hardware desig ...

Keywords: TCP/IP, asynchronous transfer mode, firewall, packet filtering, switch architecture

16 A flow-based approach to datagram security

Suvo Mittra, Thomas Y. C. Woo

October 1997 ACM SIGCOMM Computer Communication Review, Proceedings of the ACM SIGCOMM '97 conference on Applications, technologies, architectures, and protocols for computer communication SIGCOMM

'97, Volume 27 Issue 4

Publisher: ACM Press

Full text available: pdf(2.04 MB)

Additional Information: full citation, abstract, references, citings, index

Datagram services provide a simple, flexible, robust, and scalable communication abstraction; their usefulness has been well demonstrated by the success of IP, UDP, and RPC. Yet, the overwhelming majority of network security protocols that have been proposed are geared towards connection-oriented communications. The few that do cater to datagram communications tend to either rely on long term host-pair keying or impose a session-oriented (i.e., requiring connection setup) semantics. Separately, t ...

17 Linux and the Next Generation Internet

Stan Michael Stricklen, Bob Cummings

April 2000 Linux Journal

Publisher: Specialized Systems Consultants, Inc.

Full text available: html(25.62 KB) Additional Information: full citation, abstract, references, index terms

This article describes the authors' implementation of a demonstration environment for differentiated Internet services (DiffServ) using Linux-based routers.

18 Adaptive resource management for flow-based IP/ATM hybrid switching systems Hao Che, San-qi Li, Arthur Lin October 1998 IEEE/ACM Transactions on Networking (TON), Volume 6 Issue 5



Publisher: IEEE Press

Full text available: pdf(570.85 KB) Additional Information: full citation, references, index terms

Keywords: adaptive resource management, cut-through switching, flow cache management, flow classification, flow-based IP/ATM hybrid switching

19 A dynamic view-oriented group communication service

Roberto De Prisco, Alan Fekete, Nancy Lynch, Alex Shvartsman

June 1998 Proceedings of the seventeenth annual ACM symposium on Principles of distributed computing PODC '98

Publisher: ACM Press

Full text available: pdf(3.91 MB) Additional Information: full citation, references, citings, index terms

Fast and scalable layer four switching

V. Srinivasan, G. Varghese, S. Suri, M. Waldvogel October 1998 ACM SIGCOMM Computer Communication Review, Proceedings of the ACM SIGCOMM '98 conference on Applications, technologies,

architectures, and protocols for computer communication SIGCOMM

'98, Volume 28 Issue 4

Publisher: ACM Press

Additional Information: full citation, abstract, references, citings, index Full text available: pdf(1.76 MB) terms

In Layer Four switching, the route and resources allocated to a packet are determined by the destination address as well as other header fields of the packet such as source address, TCP and UDP port numbers. Layer Four switching unifies firewall processing, RSVP style resource reservation filters, QoS Routing, and normal unicast and multicast forwarding into a single framework. In this framework, the forwarding database of a router consists of a potentially large number of filters on key header ...

Results 1 - 20 of 28 Result page: 1 2 next

> The ACM Portal is published by the Association for Computing Machinery. Copyright @ 2007 ACM, Inc. Terms of Usage Privacy Policy Code of Ethics Contact Us

> Useful downloads: Adobe Acrobat QuickTime Windows Media Player Real Player



Subscribe (Full Service) Register (Limited Service, Free) Login

The ACM Digital Library Search:

+"remote method invocation" +classify flow

SEARCH

THE ACH DIGITAL LIBRARY

Feedback Report a problem Satisfaction survev

Published before January 2001 Terms used remote method invocation classify flow

Found 19 of 118,363

Relevance scale

Sort results by

results

relevance Display expanded form

Save results to a Binder Search Tips Open results in a new

Try an Advanced Search Try this search in The ACM Guide

Results 1 - 19 of 19

Fast detection of communication patterns in distributed executions

window

Thomas Kunz, Michiel F. H. Seuren

November 1997 Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research CASCON '97

Publisher: IBM Press

Additional Information: full citation, abstract, references, index terms Full text available: pdf(4.21 MB)

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

Customization of object request brokers by application specific policies Bo Nørregard Jørgensen, Eddy Truyen, Frank Matthijs, Wouter Joosen April 2000 IFIP/ACM International Conference on Distributed systems platforms Middleware '00

Publisher: Springer-Verlag New York, Inc.

Full text available: 🔁 pdf(160.32 KB) Additional Information: full citation, abstract, references, citings

This paper presents an architectural framework for customizing Object Request Broker (ORB) implementations to application-specific preferences for various non-functional requirements. ORB implementations are built by reusing a domain-specific componentbased architecture that offers support for one or more non-functional requirements. The domain-specific architecture provides the mechanism that allows the ORB to reconfigure its own implementation at run-time on the basis of application-specif ...

Putting OO distributed programming to work

Pascal Felber, Rachid Guerraoui, Mohamed E. Favad

November 1999 Communications of the ACM, Volume 42 Issue 11

Publisher: ACM Press

Full text available: pdf(117.85 KB) html(26.58 KB)

Additional Information: full citation, index terms

4 Asynchronous information space analysis architecture using content and structurebased service brokering Ke-Thia Yao, In-Young Ko, Ragy Eleish, Robert Neches June 2000 Proceedings of the fifth ACM conference on Digital libraries DL '00 Publisher: ACM Press Additional Information: full citation, abstract, references, citings, index Full text available: pdf(470.15 KB) <u>terms</u> Our project focuses on rapid formation and utilization of custom collections of information for groups focused on high-paced tasks. Assembling such collections, as well as organizing and analyzing the documents within them, is a complex and sophisticated task. It requires understanding what information management services and tools are provided by the system, when they appropriate to use, and how those services can be composed together to perform more complex analyses. This paper describes ... Keywords: asynchronous service access, component architecture, content and structure, data-driven brokering, information analysis, information management, metadata Measuring the performance of communication middleware on high-speed networks Aniruddha Gokhale, Douglas C. Schmidt August 1996 ACM SIGCOMM Computer Communication Review, Conference proceedings on Applications, technologies, architectures, and protocols for computer communications SIGCOMM '96, Volume 26 Issue 4 Publisher: ACM Press Additional Information: full citation, abstract, references, citings, index Full text available: pdf(270.13 KB) terms Conventional implementations of communication middleware (such as CORBA and traditional RPC toolkits) incur considerable over-head when used for performancesensitive applications over high-speed networks. As gigabit networks become pervasive, inefficient middleware will force programmers to use lower-level mechanisms to achieve the necessary transfer rates. This is a serious problem for mission/life-critical applications (such as satellite surveillance and medical imaging). This paper compares t ... 6 Special issue on distributed computing: Designing a distributed computing environment for global-scale systems: challenges and issues Rajeev R. Raje, Sivakumar Chinnasamy April 1999 ACM SIGAPP Applied Computing Review, Volume 7 Issue 1 Publisher: ACM Press Full text available: pdf(574.78 KB) Additional Information: full citation, abstract, references, index terms With the phenomenal growth of the Internet and other related technological advancements in both hardware and software, the field of computing has reached a state, where we need to think ahead and plan for future needs of computing for developing global-scale systems. Unfortunately, the present computing environments have many shortcomings that may act as bottlenecks for the development of the next generation of global information systems. Since the current scenario envisions a major shift in the ... Tools and approaches for developing data-intensive Web applications: a survey Piero Fraternali September 1999 ACM Computing Surveys (CSUR), Volume 31 Issue 3 Publisher: ACM Press Additional Information: full citation, abstract, references, citings, index Full text available: pdf(524.80 KB) terms The exponential growth and capillar diffusion of the Web are nurturing a novel generation

of applications, characterized by a direct business-to-customer relationship. The development of such applications is a hybrid between traditional IS development and Hypermedia authoring, and challenges the existing tools and approaches for software production. This paper investigates the current situation of Web development tools, both in the commercial and research fields, by identifying and characte ...

Keywords: HTML, Intranet, WWW, application, development

8	A distributed 3D graphics library Blair MacIntyre, Steven Feiner July 1998 Proceedings of the 25th annual conference on Computer graphics and interactive techniques SIGGRAPH '98 Publisher: ACM Press Full text available: pdf(355.83 KB) Additional Information: full citation, references, citings, index terms	
	Keywords : distributed shared memory, distributed virtual environments, object-oriented graphics, shared-data object model	
9 �	Transparent communication for distributed objects in Java Michael Hicks, Suresh Jagannathan, Richard Kelsey, Jonathan T. Moore, Cristian Ungureanu June 1999 Proceedings of the ACM 1999 conference on Java Grande JAVA '99 Publisher: ACM Press Full text available: pdf(1.30 MB) Additional Information: full citation, references, citings, index terms	
10	PERSIVAL, a system for personalized search and summarization over multimedia healthcare information Kathleen R. McKeown, Shih-Fu Chang, James Cimino, Steven Feiner, Carol Friedman, Luis Gravano, Vasileios Hatzivassiloglou, Steven Johnson, Desmond A. Jordan, Judith L. Klavans, André Kushniruk, Vimla Patel, Simone Teufel January 2001 Proceedings of the 1st ACM/IEEE-CS joint conference on Digital libraries JCDL '01 Publisher: ACM Press	
	Full text available: pdf(369.13 KB) Additional Information: full citation, abstract, references, citings, index terms In healthcare settings, patients need access to online information that can help them understand their medical situation. Physicians need information that is clinically relevant to an individual patient. In this paper, we present our progress on developing a system, PERSIVAL, that is designed to provide personalized access to a distributed patient care digital library. Using the secure, online patient records at New York Presbyterian Hospital as a user model, PERSIVAL's components tailor s	
	Keywords : medical digital library, multimedia, natural language, personalization, query interface, search, summarization	

	Full text available: pdf(958.64 KB) Additional Information: full citation, references, citings, index terms	
12	Thinking objectively: object-oriented abstractions for distributed programming Rachid Guerraoui, Mohamed E. Fayad August 1999 Communications of the ACM, Volume 42 Issue 8 Publisher: ACM Press Full text available: pdf(115.74 KB) html(14.72 KB) Additional Information: full citation, citings, index terms	
13 ②	(CDROM) Supercomputing '97 Publisher: ACM Press	
	Full text available: pdf(321.67 KB) Additional Information: full citation, abstract, references, citings We describe distributed and parallel algorithms for processing remotely sensed data such as geostationary satellite imagery. We have built a distributed data repository based around the client-server computing model across wide-area ATM networks, with embedded parallel and high-performance processing modules. We focus on algorithms for classification, geo-rectification, correlation and histogram analysis of the data. We consider characteristics of image data collected from the Japanese GMS5 geos Keywords: ATM, classification, client-server, remote-sensing, satellite imagery	
14 �	Moksha: exploring ubiquity in event filtration-control at the multi-user desktop	
	Additional Information: full citation, abstract, references, citings, index terms Collaborative systems need to provide some means for users to be aware of peer activities. Common approaches involve broadcasting events generated as a result of a particular user's actions at the interface to others. Rather than flooding users with information about all activities occurring in the shared environment, filtration techniques allow each user to be exposed to relevant awareness information. Such techniques are often based on user configurable agents. Unfortunately, these so far do n	
15	Keywords : auditory display, awareness, common information space, multi-users desktop system, multimedia browsing	
15 ③	Interception in the Aroma system N. Narasimhan, L. E. Moser, P. M. Melliar-Smith June 2000 Proceedings of the ACM 2000 conference on Java Grande JAVA '00 Publisher: ACM Press Full text available: pdf(1.06 MB) Additional Information: full citation, references, citings, index terms	

16 ②	Composable Conductation initiative and the Conductation and the Conducta	
	Publisher: ACM Press	
	Full text available: pdf(184.80 KB) Additional Information: full citation, abstract, references, citings, index terms	
	In general, collaboration infrastructures have supported sharing of an object based on its logical structure. However, current implementations assume an implicit binding between this logical structure and particular system-defined abstractions. We present a new composable design based on programming patterns that eliminates this binding, thereby increasing the range of supported objects and supporting extensibility.	
17 �	Discovery of mark for Clark NacClark Branc Contract from a distributed database	
	Full text available: pdf(132.32 KB) Additional Information: full citation, references, index terms	
	Keywords : aggregates, distributed databases, exception discovery, multi-level statistical models, rule discovery, sufficient statistics	
18	MIMO — An infrastructure for monitoring and managing distributed middleware	
	environments Günther Rackl, Markus Lindermeier, Michael Rudorfer, Bernn Süss April 2000 IFIP/ACM International Conference on Distributed systems platforms Middleware '00	
	Publisher: Springer-Verlag New York, Inc.	
	Full text available: pdf(448.00 KB) Additional Information: full citation, abstract, references, citings	
	This paper presents the MIMO MIddleware MOnitoring system, an infrastructure for monitoring and managing distributed, heterogeneous middleware environments. MIMO is based on a new multi-layer-monitoring approach for middleware systems, which classifies collected information using several abstraction levels. The key features of MIMO are its openness, flexibility, and extensibility. MIMO's research contribution is to enable easy integration of heterogeneous middleware platforms, to be suited	
19	Database model for web-based cooperative applications	
٩	Waldemar Wieczerzycki	
~	November 1999 Proceedings of the eighth international conference on Information	
	and knowledge management CIKM '99 Publisher: ACM Press	
	Full text available: pdf(1.18 MB) Additional Information: full citation, abstract, references, index terms	
	In this paper we propose a model of a database that could become a kernel of cooperative database applications. First, we propose a new data model CDM (Collaborative Data Model) that is oriented for the specificity of multiuser environments, in particular: cooperation scenarios, cooperation techniques and cooperation management. Second, we propose to apply to databases supporting collaboration so called multiuser transactions. Multiuser transactions are flat transactions in	

Keywords: CSCW, data model, object-oriented databases, trasaction model

Results 1 - 19 of 19

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

<u>Terms of Usage Privacy Policy Code of Ethics Contact Us</u>

Useful downloads: Adobe Acrobat QuickTime Windows Media Player Real Player



Subscribe (Full Service) Register (Limited Service, Free) Login

+"remote method invocation" +classify +QoS +socket flow

SEARCH

THE ACM DIGITAL LIBRARY

Feedback Report a problem Satisfaction survey

Published before January 2001 Terms used remote method invocation classify QoS socket flow

Found 1 of 118,363

Sort results

by Display expanded form results

relevance

Save results to a Binder Search Tips Open results in a new

Try an Advanced Search Try this search in The ACM Guide

Results 1 - 1 of 1

Relevance scale

1 Fast detection of communication patterns in distributed executions

window

Thomas Kunz, Michiel F. H. Seuren

November 1997 Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research CASCON '97

Publisher: IBM Press

Full text available: pdf(4.21 MB)

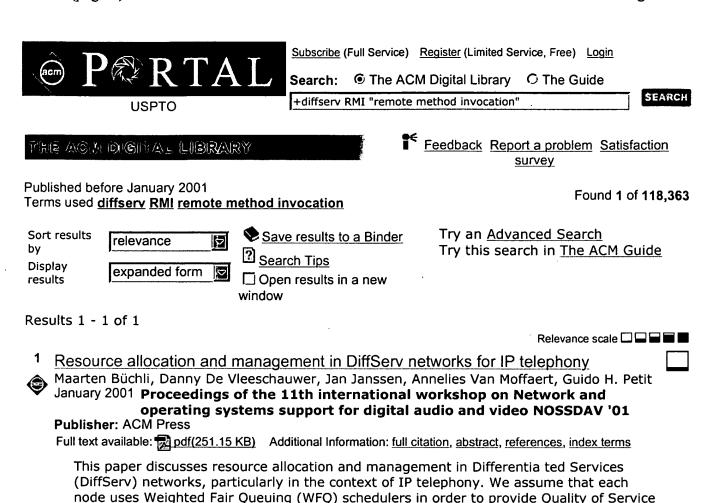
Additional Information: full citation, abstract, references, index terms

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

Results 1 - 1 of 1

The ACM Portal is published by the Association for Computing Machinery. Copyright @ 2007 ACM, Inc. Terms of Usage Privacy Policy Code of Ethics Contact Us

Useful downloads: Adobe Acrobat QuickTime Windows Media Player



Results 1 - 1 of 1

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc. Terms of Usage Privacy Policy Code of Ethics Contact Us

(QoS) to aggregates of traffic. All voice traffic destined for a certain output interface is aggregated into a single queue. When a voice flow traverses a node, its packets are

placed in this queue; which is drained at a certain rate, de ...

Useful downloads: Adobe Acrobat QuickTime Windows Media Player